|       | 1               | n         | dex      | x c       | f               | Cla       | aiı       | ms        | ;               |   |            |          |          |              | Api     | JIIC         | auc      | )               | <b>4</b> 0. |             |          |   |                 | ~+           | hii      | Ca      | nų           | 3)           |               |                   |
|-------|-----------------|-----------|----------|-----------|-----------------|-----------|-----------|-----------|-----------------|---|------------|----------|----------|--------------|---------|--------------|----------|-----------------|-------------|-------------|----------|---|-----------------|--------------|----------|---------|--------------|--------------|---------------|-------------------|
| H     | Index of Claims |           |          |           |                 |           |           |           |                 |   |            |          |          | 10/768,662   |         |              |          |                 |             |             |          |   |                 | ABE ET AL.   |          |         |              |              |               |                   |
|       |                 |           |          |           |                 |           |           |           |                 |   |            |          |          |              | Exa     | ımi          | ner      |                 |             |             |          |   |                 | Ar           | t U      | nit     |              |              |               |                   |
|       |                 |           |          |           |                 |           |           |           |                 |   |            |          |          |              | Joh     | יחו          | ΓK       | wo              | n           |             |          |   |                 | 37           | '∆7      |         |              |              |               |                   |
|       |                 | -         |          |           |                 |           |           |           |                 |   |            |          |          |              | 301     |              | . 1      | ·VVC            | // I        |             |          |   |                 | 31           | 71       |         |              |              |               |                   |
|       | Γ.              | Τ         |          |           |                 | 7         |           | Г         |                 |   | rou        | gh n     | um       | era          | n       | 7            |          |                 |             |             |          | ]   |                 |              |          |         |              |              |               |                   |
|       | √               |           | Reje     | ect       | ed              |           |           | -         |                 | , | Ca         | incel    | led      |              | -,      |              | N        | N               | on-         | Elec        | ted      |   | A               |              | ΑĮ       | ppe     | eal          |              |               |                   |
|       |                 | Ť         |          |           | _               | 1         |           |           |                 |   | _          |          |          |              |         | 1            | <u> </u> |                 | _           | _           |          | 1   |                 | 374          |          |         |              |              |               |                   |
|       | =               | 1         | Allo     | owe       | ₽d              |           |           | ÷         |                 |   | Re         | stric    | ted      |              |         |              | ı        | In              | iter        | fere        | nce      |   | 0               | ,            | Ob.      | jec     | tec          | d            |               |                   |
|       |                 |           |          |           |                 |           |           |           | _               |   |            |          |          |              |         | _            |          |                 |             | <del></del> |          | <u>,                                     </u> | _               |              |          |         |              |              |               |                   |
| Claim | $\neg$          | Т         | _        | 1         | Da <sup>1</sup> | te        | Т         | Т         | Н               | 1 | Cla        |          | $\neg$   | _            |         | Dat          | e<br>T   |                 | _           | $\dashv$    | Cli      | aim<br>I                                      | Н               | -            | Т        | Da      | ate<br>T     | Т            | $\overline{}$ | Т                 |
| Final | 5/8/05          |           |          |           |                 |           |           |           |                 |   | Final      | Original |          |              |         |              |          |                 |             |             | Final    | Original                                      |                 |              |          |         |              |              |               |                   |
| ᄩ   울 | 5/8             |           |          |           |                 |           |           |           |                 |   | ι <u>Ε</u> | Orig     |          |              |         |              |          |                 |             |             | 懂        | l g   |                 |              |          | İ       |              |              | .             |                   |
| 1     |                 | +         | +        | +         | -               | +         | +         | +         | Н               |   |            | 51       | $\dashv$ | +            |         | +            | +        | $\dashv$        | +           | $\dashv$    |          | 101   | $\vdash \vdash$ | +            | +        | +       | +            | +            | +             | +                 |
| 2     |                 | $\dagger$ | +        | +         | +               | $\dagger$ | +         | +         | Н               |   |            | 52       | _        | +            | +       | $\dagger$    |          | $\vdash$        | $\dashv$    | $\dashv$    |          | 102   | H               | +            | +        | +       | +            | +            | +             | +                 |
| 3     | 3 ]             | Ţ         |          |           | L               |           |           | L         | П               |   |            | 53       | $\Box$   | T            |         | I            |          | П               | $\Box$      | $\Box$      |          | 103   |                 | 工            |          | Ţ       | 1            | $\Box$       |               | 1:                |
| 4     |                 | +         | +        | +         | ╀               | +         | +         | $\vdash$  | Н               |   |            | 54<br>55 | $\dashv$ | +            | +       | +            | -        | $\vdash$        | +           | $\dashv$    |          | 104<br>105                                    | $\vdash$        | $\dashv$     | +        | +       | +            | +            | +             | +                 |
| 6     |                 | +         | $\dashv$ | $\dagger$ | $\dagger$       | +         | T         | $\dagger$ | H               |   |            | 56       | $\dashv$ | +            | +       | $\dagger$    | $\vdash$ | $\vdash$        | $\dashv$    | $\dashv$    | -        | 106   | H               | $\dashv$     | +        | +       | +            | +            | +             | $\dagger$         |
| 7     | 7               | Ţ         | $\perp$  | I         |                 | I         |           |           | П               |   |            | 57       |          | $\downarrow$ |         | L            |          |                 | $\Box$      | $\exists$   |          | 107   |                 | ightharpoons | $\perp$  | $\perp$ | $\downarrow$ | <b>コ</b>     | $\perp$       |                   |
| 9     |                 | +         | +        | ╁         | ╀               | +         | +         | +         | Н               |   |            | 58<br>59 | $\dashv$ | +            |         | +            | $\vdash$ |                 |             | $\dashv$    |          | 108<br>109                                    | $\vdash \vdash$ | +            | +        | +       | +            | +            | $\dashv$      | +                 |
| 10    | 0 1             | $\dagger$ |          | T         | t               | $\perp$   | T         | 1         | H               |   |            | 60       | _        | $^{\dagger}$ | $\perp$ | $^{\dagger}$ | $\vdash$ | $\Box$          | $\dashv$    | -           | ,        | 110   | $\Box$          | $\dashv$     | <u> </u> | $\pm$   | +            | +            | _             | +                 |
| 1     |                 | Ţ         |          |           |                 | 1         | 1         |           | П               | [ |            | 61       | _        | $\downarrow$ |         |              |          |                 | $\Box$      | $\exists$   |          | 111   | Ш               | _            |          | 1       | $\downarrow$ | $\downarrow$ |               | $\perp$           |
| 1:    |                 | +         | +        | +         | ┼-              | +         | +         | +         | $\vdash$        |   |            | 62<br>63 | +        | +            | +       | +            | $\vdash$ | $\vdash \vdash$ | $\dashv$    | $\dashv$    |          | 112   | $\vdash \vdash$ | $\dashv$     | +        | +       | +            | +            | +             | +                 |
| 1     |                 | $\dagger$ | +        | +         | +               | ╁         | +         | T         | Н               |   |            | 64       | Ŧ        | +            | +       | ╁╌           |          | $\vdash$        | $\dashv$    | $\dashv$    | -        | 114   | H               | $\dashv$     | +        | +       | $\dagger$    | $\dashv$     | +             | +                 |
| 1:    | 5               | T         |          |           |                 |           | I         |           |                 |   |            | 65       |          |              | 1       |              |          |                 |             |             |          | 115   |                 |              | 1        | 1       | 1            |              |               |                   |
| 11    |                 | ╁         | +        | ╁         | ╄               | +         | ╁         | ╁         | Н               |   |            | 66<br>67 | $\dashv$ | -            |         | ╁            |          |                 | +           | $\dashv$    | $\vdash$ | 116<br>117                                    | Н               |              | +        | +       | $\dashv$     | $\dashv$     | _             | ╁                 |
| 1/1   |                 | $\dagger$ | $\top$   | $\dagger$ | $\vdash$        | +         | $\dagger$ | +         | Н               |   |            | 68       | $\dashv$ | $\dagger$    |         | +-           | ${}^{+}$ |                 | -           | $\dashv$    |          | 118   |                 | +            | +        | +       | +            | +            | +             | ╁╌                |
| 19    |                 | Ţ         |          |           |                 |           | Ţ         |           |                 |   |            | 69       |          | 1            | 1       |              |          |                 |             |             |          | 119   |                 |              | 1        |         |              |              |               |                   |
| 20    |                 |           |          | +         | ╀               | ╀         | ╁         | ╁         | Н               | - |            | 70<br>71 | $\dashv$ | +            | _       | -            | ╁        | $\dashv$        |             | -           |          | 120<br>121                                    | $\vdash$        | +            | +        | +       | +            | +            | -             | +                 |
| 2     |                 | +         | -        | +-        | 十               | +         | ╁         | +         | Н               |   |            | 72       | $\dashv$ | $\dagger$    | +       | +            | ╁        | $\dashv$        |             | $\dashv$    | -        | 122   |                 | +            | +        | +       | +            | +            | +             | +                 |
| 2     |                 | Ţ         | Ţ        |           | $oxed{\Box}$    | $\Box$    | I         |           |                 |   |            | 73       |          | $\perp$      |         | 1            |          |                 | $\Box$      |             |          | 123   |                 |              | 1        | I       | 1            | $\Box$       |               |                   |
| 2     |                 | +         | -        | +         | ┝               | +         | ╁         | ╁         | Н               |   |            | 74<br>75 | $\dashv$ | +            | -       | -            | ╁        | -               | -           | $\dashv$    |          | 124<br>125                                    | -               | +            | +        | +       |              | +            |               | +                 |
| 2     | 6               | t         |          |           |                 |           | t         |           |                 |   |            | 76       |          | $\forall$    | 1       | 1            |          |                 | +           | _           |          | 126   | $\Box$          | +            | 十        | 十       | +            | $\dashv$     |               | T                 |
|       | 7               | Ţ         |          | Ξ         | L               | F         | F         | $\vdash$  | П               |   |            | 77       | 4        | 4            |         | $\perp$      | F        |                 | Ţ           | $\exists$   |          | 127   | П               | 4            | Ţ        | 7       | 1            | T            | Ţ             | Γ                 |
| 2     |                 | +         | +-       | +         | +               | +         | +         | +         | Н               |   |            | 78<br>79 | +        | +            | +       | +            | -        | $\vdash$        | $\dashv$    | $\dashv$    |          | 128<br>129                                    | ${\mathbb H}$   | $\dashv$     | +        | +       | +            | +            | $\dashv$      | +                 |
| 3     | 0               | İ         |          |           |                 | İ         |           |           |                 |   |            | 80       | 丁        | 士            |         |              |          |                 |             |             |          | 130   |                 |              | $\perp$  | $\perp$ |              |              | 士             | 士                 |
| 3     |                 | F         |          | $\bot$    | $\vdash$        | $\bot$    | F         | $\bot$    | П               |   |            | 81       | $\Box$   | 4            | $\Box$  | $\perp$      | igspace  |                 | $\Box$      | _           |          | 131   |                 | $\bot$       | Ţ        | 7       | 1            | $\top$       |               | F                 |
| 3:    |                 | +         | +        | +         | +               | +         | +         | ╁         | Н               |   |            | 82<br>83 | $\dashv$ | +            | +       | +            | $\vdash$ | $\vdash$        | $\dashv$    | $\dashv$    |          | 132<br>133                                    | $\vdash$        | +            | +        | +       | +            | $\dashv$     | +             | +                 |
| 3     | 4               | 1         |          |           | $\Box$          | $\perp$   | 上         | $\perp$   | П               |   |            | 84       | 士        | $\perp$      |         |              |          |                 |             | $\exists$   |          | 134   |                 |              | 土        | $\pm$   | $\perp$      | $\exists$    |               |                   |
| 3     |                 | 1         |          | 1         |                 | 1         | F         | 1         | П               |   |            | 85       | $\dashv$ | 4            | _[_     | $\bot$       | igsqcup  |                 | $\dashv$    | $\exists$   |          | 135   |                 | $ \Box$      | $\bot$   | $\bot$  | $\bot$       | $\bot$       |               |                   |
| 3     |                 | +         |          | +-        | +               | +         | +         | +         | Н               |   |            | 86<br>87 | $\dashv$ | +            | +       | +            | $\vdash$ | $\vdash$        | $\dashv$    | $\dashv$    | -        | 136<br>137                                    | $\vdash \vdash$ | $\dashv$     | +        | +       | +            | +            | $\dashv$      | +                 |
| 3     | 8               | 1         |          |           |                 |           | T         |           | Ħ               |   |            | 88       |          | 士            |         |              |          |                 |             | $\exists$   |          | 138   |                 | 士            | 士        | $\pm$   | $\pm$        | $\perp$      |               |                   |
| 3     |                 | $\perp$   |          |           |                 | 1         | Ļ         | 1         | $\Box$          |   |            | 89       | 4        | $\bot$       | $\perp$ | $\perp$      |          |                 | $\dashv$    | _           |          | 139   |                 | $\perp$      | $\bot$   | $\bot$  | Ţ            | $\downarrow$ |               | $oxed{\Box}$      |
| 4     |                 | +         | +        | +         | ╁               | +         | +-        | ╁╌        | $\vdash$        |   |            | 90<br>91 | $\dashv$ | +            | +       | +            | $\vdash$ | $\vdash$        | +           | $\dashv$    | -        | 140<br>141                                    | $\vdash$        | $\dashv$     | +        | +       | +            | +            | +             | +                 |
| 4:    | 2               | 1         |          |           | L               | T         |           |           | 口               |   |            | 92       | 士        | 士            | $\perp$ | T            |          |                 |             | ゴ           |          | 142   |                 | 士            | $\perp$  | 士       | 士            | $\exists$    | 士             |                   |
| 4:    |                 | 1         | $\bot$   | $\perp$   | Ļ               | 1         | Ļ         | $\bot$    | П               | [ |            | 93<br>94 | $\bot$   | $\bot$       | $\perp$ | $\perp$      | oxdot    |                 | $\dashv$    | _           |          | 143<br>144                                    | $\Box$          | $\bot$       | $\bot$   | 4       | 1            | $\perp$      |               | $\perp$           |
| 4:    |                 | +         | +        | +         | +               | ╁         | ╁╴        | +         | H               |   |            | 95       | $\dashv$ | +            | +       | +            | +        | $\vdash$        | +           | $\dashv$    | -        | 144   | $\vdash$        | $\dashv$     | +        | +       | +            | +            | +             | +                 |
| 4     | 6               | 1         |          | T         |                 | İ         | T         | T         | П               |   |            | 96       |          | 士            |         |              |          |                 |             | $\exists$   |          | 146   |                 | 土            |          | 土       | 士            |              | $\perp$       | $\perp$           |
| 4     |                 | 1         | $\bot$   | $\perp$   | L               | Ļ         | $\bot$    | $\perp$   | П               |   |            | 97       | $\dashv$ | $\bot$       | $\bot$  | $\bot$       | $\vdash$ |                 | $\dashv$    | _           |          | 147   |                 | $-\Gamma$    | Ţ        | Ţ       | $\perp$      | $\bot$       | $\perp$       | $oldsymbol{\Box}$ |
| 4     | 8               | ╀         | +        | +-        | ╀               | +         | ╁         | ╀         | $\vdash \vdash$ |   |            | 98       | $\dashv$ | +            | +       | +            | -        | $\mid - \mid$   | +           | $\dashv$    | <u> </u> | 148   |                 | +            | +        | +       | +            | +            | -             | +                 |

100

Application No.

Applicant(s)